

**Amendments to the Specification**

Please replace the first paragraph on page 3 with the following amended paragraph:

circuit 104. Furthermore, input lines 118 through 124 connect input circuit 104 to sensors 30 through 36 which are provided for each wheel brake. Additional input lines 126 through 128 connect input circuit 104 to measurement devices 130 through 132 for detection of additional operating quantities of the brake system, the vehicle and/or its drive unit. Such operating quantities include, for example, the wheel speeds, optionally the engine torque delivered by the drive unit, loads per axle, the pressure in the brake line, etc. Several output lines are connected to output circuit 106. The output lines over which at least one valve of a pressure modulator is operated are shown as an example. A pump 42 is controlled over another output line 138. Control unit 100 controls the brake system as a function of the signal quantities supplied to it as described above.

Please replace the first paragraph on page 7 with the following amended paragraph:

elapsed, which amounts to a few 10 ms to a few 100 ms in the preferred embodiment, basic values Spedbas are determined according to step 212 as described for step 206. If it is found in step 208 that the displacement signal detected is not less than the second threshold value, then according to step 214, stored basic value Spedbas is taken from a preceding operating cycle and used as the respective basic value without determining a new basic value. The program is terminated after steps 206, 212 or 214 and is not initiated again until the next time the system is activated.